

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 20 DEC 2005

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Applicant's or agent's file reference 18004 PCT	<b>FOR FURTHER ACTION</b>  See Form PCT/IPEA/416	
International application No. PCT/DK2004/000772	International filing date (day/month/year) 08.11.2004	Priority date (day/month/year) 10.11.2003
International Patent Classification (IPC) or national classification and IPC H04L29/06		
Applicant GN NETCOM A/S et al.		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> <i>sent to the applicant and to the International Bureau</i> a total of 6 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> <i>(sent to the International Bureau only)</i> a total of (Indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I      Basis of the opinion</p> <p><input checked="" type="checkbox"/> Box No. II     Priority</p> <p><input type="checkbox"/> Box No. III    Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV    Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V     Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI    Certain documents cited</p> <p><input type="checkbox"/> Box No. VII   Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII   Certain observations on the international application</p>		
Date of submission of the demand  09.09.2005	Date of completion of this report  20.12.2005	
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Veen, G  Telephone No. +31 70 340-3811	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/DK2004/000772

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

**Description, Pages**

1-4 received on 09.09.2005 with letter of 09.09.2005

**Claims, Numbers**

1-9 received on 09.09.2005 with letter of 09.09.2005

**Drawings, Sheets**

1/1 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

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\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. II Priority**

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1. ☒ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
- ☐ copy of the earlier application whose priority has been claimed (Rule 66.7(a)).
  - ☒ translation of the earlier application whose priority has been claimed (Rule 66.7(b)).
2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-9
Inventive step (IS)	Yes: Claims	
	No: Claims	1-9
Industrial applicability (IA)	Yes: Claims	
	No: Claims	1-9

2. Citations and explanations (Rule 70.7):

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item V.**

The following document is referred to in this communication:

D1 : EP 0990969

- 1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-9 is not inventive in the sense of Article 33(3) PCT.
- 1.1 D1 discloses all the features of independent claim 1 (see D1, column 3, lines 3-11; 18-20; 35-44; c.3l.57-c.4l.3), except for the feature that the commands to be transferred to the softphone are entered via control buttons on the control unit. (in paragraph 16, D1 discloses the ability to initiate specified types of outgoing calls, without explicitly stating **how** such calls are initiated).

It is obvious that, whenever it is desired to transfer commands to an application (the softphone in this case) running on a PC, these commands must be entered on a suitable input device connected to the PC. In the present case, there are at least two input devices (the keyboard and the control unit) connected to the PC, both of which are suitable to transfer commands to the PC. Therefore, the designer has to make a choice, and such a choice cannot be considered to imply an inventive step in the sense of Art. 33(2) PCT.

Therefore, claim 1 does not meet the requirements of Art. 33 PCT.

- 1.2 Dependent claims 2-9 do not contain any features which, in combination with the features of claim 1, to which they refer, meet the requirements of the PCT in respect of novelty and inventive step (Article 33(2) and (3) PCT).

**Re Item VIII**

**Certain observations on the international application**

- 2.1 Due to the formulation ("Switching"), it is not clear whether claims 1-9 relate to an apparatus or to a method.

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(SEPARATE SHEET)**

International application No.

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- 2.2 In claim 1, line 6, it is not clear whether the expression "via ... unit" relates to "adapted" preceding it or to "to transfer" following it. The latter option was assumed in the above reasoning.

The invention relates to switching of a communications unit to the softphone of a PC via an electrical connection.

5 Such a switching is known from the published US Patent Application No. 2003/0096589 A1.

10 This known system uses two channels for communication, viz. partly a WAN (Wide Area Network) connection for normal calls and partly a mobile network for emergency calls to e.g. 911 in the USA or 112 in Denmark. The purpose is to make it possible for an emergency call to be localized by the receiver.

15 The document does not disclose or suggest whether it is possible to use a softphone if e.g. the PC associated with the softphone is blocked by an access code.

20 EP 0 990 969 A1 discloses a system where a locked PC can be opened in a minimized state, such as allowing a telephone call. This requires that the PC has its own software to allow it to receive a telephone call by operating the PC's keyboard.

25 Accordingly, an object of the invention is to provide the option of using a softphone also even if the associated PC is blocked by a security setting, and further to get access to the PC without using the PC's own software and keyboard.

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30 The object of the invention is achieved by a switching of the type defined in the introductory portion of claim 1, which is characterized in that a control unit is coupled between the communications unit and the softphone, said control unit being adapted via control buttons on the control unit to transfer commands to the softphone, both when the PC is coupled in normal

2

position and when the PC is coupled in security position.

The softphone may hereby be used also in those cases where the other communication paths of the PC are blocked.

5

An easy installation of the control unit may be provided if, as stated in claim 2, the control unit is connected to the softphone via a USB gate, while the communications unit is connected by a wire to the control unit.

10

If a user-friendly coupling is desired where the control unit "physically" follows the communications unit, i.e. is kept e.g. in a pocket, it is an advantage if, as stated in claim 3, the control unit is connected wirelessly, e.g. by means of a short range Bluetooth connection, to the softphone and the communications unit.

15

For a suitable number of various commands to be applied from the control unit to the softphone, it is expedient if, as stated in claim 4, the control unit has a plurality of setting buttons, e.g. three. If these buttons are arranged such that one or two depressions result in the application of a command, nine different commands may be given.

20

To maintain the security of the PC when it is blocked, e.g. by an access code, it is expedient if, as stated in claim 5, the PC, when blocked for use by the security setting, is open for the reception of a limited number of commands from the control unit to the softphone.

25

This advantage is enhanced additionally if, as stated in claim 6, the control unit comprises a sound card, since the access to the PC itself, including the use of its sound card when it is otherwise blocked, is limited to the greatest extent possible.

30

## 3

The user friendliness of the switching is increased if, as stated in claim 7, the communications unit is formed by a passive headset consisting of a microphone and a speaker.

5 To increase the flexibility of the switching according to the invention additionally, it is an advantage if, as stated in claim 8, the communications unit is formed by an active headset with its own power supply and control buttons.

10 Finally, it is an advantage if, as stated in claim 9, the headset is powered from the USB gate via the control unit for the charging of the headset.

The invention will now be explained more fully with reference to the single figure of the drawing.

15

The figure schematically shows a conventional PC structure containing the usual components, such as a CPU 1, a display 2, a keyboard 3, a mouse 4, and a printer 5.

20 Further, the PC may be connected to a softphone which is denoted 15 in the figure. In practice, this softphone 15 is a graphic telephone with graphic keys and function buttons, as is known from a stationary telephone or a mobile telephone. The graphic telephone is displayed on the display 2, but is shown here as an independent unit 15 for clarity.

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~~The PC 1 has several connection options, one of which is denoted 6, which~~  
is a USB gate connected by a wire to an input 8 on a control unit 9 shown here with three buttons 10.

30 The control unit has a gate 11 which is coupled via a wire 12 to an input 13 on a communications unit, which may appropriately be a headset 14.



This headset may be of the passive type and merely consist of a microphone and a speaker. It may also be of the active type with its own power supply, amplifier and setting options:

5 It should moreover be noted that nothing prevents the control unit 9 from being coupled to the communications unit and the PC via wireless connections, such as the short range connection of the Bluetooth type or the so-called DECT standard.

10 The mode of operation of the setup will now be explained in greater detail.

When the PC is in its normal position, i.e. without any access code limitation, calls to and from the softphone are made via the headset 14.

15 Settings of the headset volume, attenuation, redialling, etc. may be controlled directly from the keyboard of the PC, or, if the headset is of the active type with independent setting options, may be set from this.

20 In those cases where the PC is on, but blocked, e.g. by an access code, it is nevertheless possible to transfer calls to or from the softphone in the PC, as the control unit 9 is adapted to be connected to the softphone and to transfer, only via the control buttons 10, a limited number of commands to the softphone, which may e.g. be the placing of emergency calls, answering of telephone calls and similar standard telephone functions. These limited  
25 commands may be provided through a driver or software application via the USB gate, which thus bypasses the access code of the PC, but do not allow the PC to be operated via the keyboard thereof.

30 All things considered, a very flexible access to a softphone is provided, no matter whether the PC is connected normally or it is blocked by a security code.

**PATENT CLAIMS**

1. Switching of a communications unit (14) to the softphone (15) of a PC via an electrical connection, characterized in that a control unit (9) is coupled between the communications unit (14) and the softphone (15), said control unit being adapted via control buttons on the control unit to transfer commands to the softphone (15), both when the PC is coupled in normal position and when the PC is coupled in security position.
2. Switching according to claim 1, characterized in that the control unit (9) is connected to the softphone via a USB gate (6), while the communications unit (14) is connected by a wire (12) to the control unit (9).
3. Switching according to claim 1, characterized in that the control unit (9) is connected wirelessly, e.g. by a short range Bluetooth connection, to the softphone and the communications unit (14).
4. Switching according to claims 1 – 2, characterized in that the control unit (9) has a plurality of setting buttons (10), e.g. three.
5. Switching according to claims 1 – 3, characterized in that the PC, when blocked for use by the security setting, is open for the reception of a limited number of commands from the control unit (9) to the softphone (15).
6. Switching according to claims 1 – 4, characterized in that the control unit (9) comprises a sound card.
7. Switching according to claims 1 – 6, characterized in that the communications unit (14) is formed by a passive headset consisting of a microphone and a speaker.

6

8. Switching according to claims 1 – 6, characterized in that the communications unit (14) is formed by an active headset with its own power supply and control buttons.

- 5 9. Switching according to claim 8, characterized in that the headset is powered from the USB gate (6) via the control unit (9) for the charging of the headset.

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